

# **EMERGENCY MEDICAL SERVICES**& TRAUMA CARE SYSTEM

FY 04-05

# WEST REGION BIENNIAL PLAN



# **EMERGENCY MEDICAL SERVICES & TRAUMA CARE SYSTEM** FY 04-05

# **WEST REGION BIENNIAL PLAN**

# **TABLE OF CONTENTS**

	MISSION & VISION STATEMENT	3
l.	AUTHORITY	4
II.	INTRODUCTION	5
III.	INJURY PREVENTION & PUBLIC INFORMATION/EDUCATION	9
IV.	PREHOSPITAL EMS AND TRAUMA SERVICES	15
V.	DESIGNATED TRAUMA CARE SERVICES	39
VI.	DATA COLLECTION AND SUBMISSION	42
VII.	EMS AND TRAUMA SYSTEM EVALUATION	44
VIII.	SUBMISSION SHEET	45
APP	<u>ENDICES</u>	

APPENDIX A:	COUNTY FIRE DISTRICT MAPS
APPENDIX B:	COUNCIL OPERATING POLICIES
<b>APPENDIX C:</b>	PATIENT CARE PROCEDURES &
	COUNTY OPERATING PROCEDURES
APPENDIX D:	QUALITY IMPROVEMENT PLAN
APPENDIX E:	TRAUMA CARE RELATED RCW & WAG

# MISSION STATEMENT

The mission of the West Region Emergency Medical Services and Trauma Care Council is to assist and guide local EMS and trauma care providers in the coordination and improvement of emergency medical services in the West Region.

# **VISION STATEMENT**

We envision a tenable regional EMS and Trauma System with a plan that:

- Keeps patient care and interest the number one priority
- Recognizes the value of prevention and public education to decrease trauma-related morbidity and mortality
- Preserves local integrity and authority in coordination with inter/intra-regional agreements

We envision the Council as a non-partisan facilitator, coordinator, and resource for regional EMS issues.

# EMERGENCY MEDICAL SERVICES & TRAUMA CARE SYSTEM FY 04-05

# WEST REGION BIENNIAL PLAN

# I. AUTHORITY

- A. **RCW 70.168.015(7):** "Emergency medical services and trauma care system plan" means a state-wide plan that identifies state-wide emergency medical services and trauma care objectives and priorities and identifies equipment, facility, personnel, training and other needs required to create and maintain a state-wide emergency medical services and trauma care system. The plan also includes a plan of implementation that identifies the state, regional and local activities that will create, operate, maintain and enhance the system. The plan is formulated by incorporating the regional emergency medical services and trauma care plans required under this chapter..."
- B. **EMTP Mission:** To establish, promote and maintain a system of effective emergency medical and trauma care services. Such a system provides timely and appropriate delivery of emergency medical treatment for people with acute illness and traumatic injury, and recognizes the changing methods and environment for providing optimal emergency care throughout the state of Washington.

# II. INTRODUCTION

# Summary of Proposed Changes within this Regional Plan

(1) Recommended numbers of Department-approved verified prehospital services within the region:

No changes which require specific Department of Health approval have been recommended. See Table F for each county.

(2) Recommended numbers and/or levels of Department-designed trauma services and/or rehabilitation services within the region:

No changes which require specific Department of Health approval have been recommended. See Table H.

(3) Current Department-approved regional Patient Care Procedures and/or County Operating Procedure appendices to current Department-approved regional Patient Care Procedures:

No changes which require specific Department of Health approval have been recommended. See Appendix C.

(4) Request(s) for Department approval of regional council-adopted higher-thanstate minimum standard(s), for implementation within the region:

No changes which require specific Department of Health approval have been recommended.

# Executive Summary

The West Region is a major population, manufacturing, transportation, and shipping corridor as well as tourist center of the state (second only in these areas to the single-county Central Region). Its jurisdictional composition is a five-county area including Grays Harbor, Lewis, North Pacific, Pierce and Thurston Counties. The large geography spreads population density centers out and increases the challenge for emergency medical service (EMS) response and treatment services in an area of over 7,000 square miles.

The West Region continues to grow at a rapid rate, ever challenging the regional EMS and trauma care system to provide timely and effective service. These service challenges stress the regional resources for response, treatment and financial capabilities. Increasing public demands for rapid, quality services are in contrast to increasingly elusive funding resources to support public health and safety.

The West Region Trauma System Plan seeks to create a model system that effectively reduces injuries and fatalities as well treats and rehabilitates trauma victims. The mission is to reduce human suffering and costs associated with morbidity and mortality. This is accomplished through providing assistance and guidance to local providers in the coordination and improvement of EMS and trauma care services.

A fully functional trauma system addresses education, prevention, rapid communications, prehospital care, in-patient trauma care, rehabilitation, a trauma registry and a quality assurance/improvement program. To guarantee all citizens and visitors appropriate and timely trauma and EMS care, the West Region focuses its efforts toward prevention education and medical training of EMS and trauma personnel, trauma level designations of hospitals, trauma verification of prehospital agencies, improved data collection, and regional quality evaluation and improvement.

# In accordance with the issues/needs/weaknesses identified within this plan, the West Region has identified the following goals for the 2004/2005 biennium:

- Seniors within the West Region receive protection from and education regarding falls leading to injury or death.
- Prevention activities and awareness are integrated components of the EMS and trauma care system.
- □ The Council supports appropriate use of child passenger safety seats and bicycle helmets in the West Region.
- Adequate funding is available to the injury prevention and public education program in order to expand the amount and quality of staff time spent, and to increase the amount given to county coalitions and other projects that fall within the committee's identified criteria.

#### **2004/2005 Goals (continued):**

- An effective West Region communications system results from cooperative efforts with other agencies involved in the EMS and trauma care system.
- County Medical Program Directors fully participate in the regional EMS and trauma care system.
- A Joint Medical Review, Planning and Standards Committee meets regularly to discuss the continuing system development and implementation needs of the regional system and develop and recommend regional patient care procedures, guidelines and general operating procedures for the Council.
- □ The number of EMS volunteers meets the needs for fire department and EMS agencies to provide service to West Region citizens.
- □ The needs of the Ongoing Training and Evaluation Program (OTEP) and Continuing Medical Education (CME) within the West Region are supported by the Regional Council.
- Partial funding and/or support to counties that express need for initial BLS training is supported by the region.
- □ EMS Instructor/Evaluator training and evaluations of instructors is supported by the Regional Council
- Patient care procedures meet county or inter-regional needs for prehospital care.
- □ The number of trained emergency department, ICU and critical care nurses meets designated trauma care service needs in the West Region.
- □ All EMS agencies routinely provide complete data to trauma care services within the West Region to enable comprehensive system evaluation.

Needs, goals, objectives, strategies and potential barriers are determined based on identifying resources and conducting ongoing needs assessments. Various methods of needs assessment are used by the Council. Depending on the issue, a written survey may be sent to the county EMS office or to individual providers that would be affected by a decision. When appropriate, results are summarized and discussed in standing committees. Some decisions are made by consensus while others are made through a formal vote. Prehospital planning often depends on input from the prehospital Council representatives and the county EMS councils. Hospital education is accomplished through at least one annual regional meeting at which the hospital education coordinators select courses and set up a schedule. All courses utilize written evaluations by students. West Region EMS also solicits a written evaluation from speakers and vendors at the annual conference.

Available local and state data resources are utilized for data collection and evaluation. These resources include but are not limited to:

- State Trauma Registry,
- Comprehensive Hospital Abstract Reporting System (CHARS),
- Washington State Department of Health, Center for Health Statistics,
- run data from local providers, and
- data from county EMS councils.

Data reports using specific filters and focused case reviews are conducted at quality improvement meetings throughout the year, in a confidential setting. Prehospital training topics are sometimes recommended by the Forum, based on areas of need highlighted by a type of call or geographic setting. Members report back on issues that need follow-up at subsequent meetings. Other local, state and national data sources are accessed whenever applicable and available.

Annual review and evaluation of the West Region Trauma Plan is part of the Council's contractual agreement with the Department of Health. The review process includes program review within the appropriate committees as well as by the full Council. An annual financial review is conducted by an independent Certified Public Accountant. The West Region QI Forum recommends issues to the Council for discussion, evaluation, provider training/education or other appropriate action.

# III. INJURY PREVENTION & PUBLIC INFORMATION/EDUCATION

# A. Regional IPPE Program

The West Region Injury Prevention and Public Education Committee include representation from active injury prevention coalitions in each county, some of the designated hospitals and local fire departments, as well as other individuals interested in prevention and public education. This committee reviews injury data for deaths and hospitalizations in the region and for each county. Mechanisms of injury are evaluated in relation to count, incidence, and age. This data is used in conjunction with program evaluations to make decisions on prevention project priorities that receive regional funding.

The West Region's prior experience with county-based prevention coalitions has demonstrated that the committee's efforts to offer funding:

- provide funding to local prevention community through an accountable organization for programs that document their effectiveness,
- strengthen communication, promote cooperation and reduce duplication of effort among community members, EMS, hospitals, public health and other public safety agencies,
- provide core membership for the regional Prevention Committee and occasionally to the full Council,
- provide opportunities to educate diverse communities about the EMS and trauma care system, and
- > provide opportunities to integrate discussion of local, regional and state perspectives and activities into the field of injury prevention and public education.

# FIGURE 1

# WEST REGION FATAL INJURIES TOP FOUR CAUSES

#### 1991-2000

1991-1995			1996-2000			
Cause	Count	Rate*	Cause	Count	Rate*	
Motor vehicle (occupant)	566	11.7	Suicide	788	15.2	
Suicide	744	15.4	Motor vehicle (occupant)	517	10.0	
Homicide	362	7.5	Falls	328	6.3	
Falls	257	5.3	Poisoning	296	5.7	
SUBTOTAL	1,929		SUBTOTAL	1929		
% of total W Reg fatalities	71%	n/a	% of total W Reg fatalities	66%	n/a	
Total W Reg fatalities	2734	56.7	Total W Reg fatalities	2936	56.6	

<sup>\*</sup>Rate of injury per 100,000 resident population.

Source: Washington State Department of Health, Center for Health Statistics, Death Certificates, October 2002.

# FIGURE 2

# WEST REGION NONFATAL INJURY HOSPITALIZATIONS TOP FOUR CAUSES

#### 1996-2000

1996-2000						
Cause	Count	Rate*				
Falls	1262	372.8				
Motor vehicle	201	59.4				
(occupant)						
Attempted Suicide	156	46.1				
Attempted Homicide	124	22.5				
SUBTOTAL	1743					
% of total W Reg	63%	n/a				
Hospitalizations						
Total W Reg Hospitalizations						
	2756	814.2				

<sup>\*</sup>Rate of injury per 100,000 resident population.

Source: Washington State Department of Health, Center for Health Statistics, Death Certificates, October 2002.

#### 1. Issue/Need/Weakness (A)

The prevalence of falls continues to be an issue within the West Region. As can be seen in Tables A and B, falls are still the number one cause of nonfatal hospitalization injuries in the West Region, and are the number four cause of death in the West Region. Approximately half of these injuries occur in individuals age 60 or older.

#### 2. Goal (A)

Seniors within the West Region receive protection from and education regarding falls leading to injury or death.

#### Objective

Support the growth of existing and new falls programs within the West Region through direct funding of programs beginning in the first quarter of FY04.

#### Strategy

In September 2002, the West Region Injury Prevention and Education Committee agreed to appropriate ¼ of its annual budget to support the growth of existing and new falls prevention programs and education in the West Region. An ad-hoc Senior Falls Committee was established in March, 2003 to assess the needs of the region. Presently, there are two active falls prevention coalitions in the West Region: *FREE* (Fall Reduction Through Education & Exercise), administered through Providence St. Peter Hospital, and *Remembering When*, a program developed by the National Fire Protection Association. These programs most often target individuals who have fallen at least once in the past year or are at risk for falling. The education and prevention activities focus on exercise, home fall hazard evaluations and installing risk reduction devices when necessary.

The allocated funds will be dispersed primarily to existing county-wide falls prevention programs that meet the committee's criteria:

- Entity has capacity to do project/program
- Uses proven "Best Practices" for implementation
- Has projected sustainability
- Includes evaluation component
- Supports program activities
- Provides feedback
- Not duplicate efforts among groups
- Prioritizes coalition efforts

#### Costs

West Region EMS is studying the feasibility of starting new falls prevention programs or coalitions both in counties without such resources and/or a region-wide program. Should these prospects be assessed as efficient and effective, some of the allocated funds will be used as seed money for these projects.

#### **Barriers**

The primary barrier expected is not having enough resources to fund all necessary existing or new programs. Additional funding will be sought through corporate and foundation grants as opportunities arise and staff time allows.

#### 3. Activity Measurement (A)

This program's success will be measured in two ways:

- 1) Positive anecdotal information relating to receptivity of program by its target audience, the elderly who are at risk for falling.
- 2) A notable decrease in the rate of falls per 100,000 resident population within the West Region by the end of 2005.

#### 1. Issue/Need/Weakness (B)

There still exists a need to better promote the role of public education and injury prevention in the EMS and trauma care system.

#### 2. Goal (B)

Prevention activities and awareness are integrated components of the West Region EMS and Trauma Care System.

#### **Objective #1**

Sponsor at least one educational event in FY04 that provides didactic and hands-on experience with prevention principles and practices for EMS and trauma care providers.

#### Strategy

Prevention Committee of the Council will plan an annual prevention workshop to be held at the West Region EMS Conference.

#### **Objective #2**

Utilize the West Region website and office as an informational resource for 1) injury prevention and public education specialists, 2) EMS and trauma care system providers, as well as 3) the general public. Use the site to track the kinds and amounts of materials requested to better direct future support. Update Injury Prevention section of West Region website by April, 2004.

#### Strategy

Maintain ongoing staff support, whether paid or volunteer, to keep the West Region website and office up to date and relevant with regional information on injury prevention and public education as well as activities within the EMS and trauma care system.

#### Costs

Annual cost of the Injury Prevention Workshop is approximately \$4,000. Costs are expected to be minimal for updating the West Region website, unless additional staff is hired for the project

#### **Barriers**

The primary barrier identified is staff time to devote to this goal.

#### 3. Activity Measurement (B)

Participant registration for the workshop will be recorded in a database that includes name, agency, credentials and volunteer/paid status. Participant attendance will be tracked through required check-in at the main conference registration desk Participants and speakers are asked to complete a written evaluation. Evaluations are summarized and shared with speakers, the Prevention Committee and the Conference Planning Committee.

Increased visits to the injury prevention and public education portion of the West Region website as well as increased use of information and materials available at the West Region office will be measurements of success.

#### 1. Issue/Need/Weakness (C)

Child passenger safety and bicycle safety continue to be top priorities for the injury prevention and public education program, and correspondingly motor vehicle related injuries and deaths are still high on the list for leading causes of injury and death in the West Region. See Figures 1 and 2.

#### 2. Goal (C)

The Council supports appropriate use of child passenger safety seats and bicycle helmets in the West Region.

#### **Objective #1**

Support correct usage of child passenger safety seats in all counties of the West Region through funding of county coalitions in FY04.

#### Strategy

Continue to provide funding to county coalitions that aim to educate the public about and increase the use of child passenger safety seats.

#### **Objective #2**

Support bicycle safety and the correct usage of bicycle helmets in all counties of the West Region through annual distribution of helmets in FY04 and FY05.

#### Strategy

Distribute 500 bicycle helmets to programs that provide helmet fitting and bicycle safety education.

#### Costs

Costs for these projects are allocated through the annual Council budget.

#### **Barriers**

Potential barriers include lack of awareness in region about availability of mini-grants, and competition for funds.

#### 3. Activity Measurement (C)

It is unlikely that the need for child passenger safety seats and bicycle helmets will ever completely subside because as each new child is born, there is another individual that will need one or both of these devices. So, success of this program will not be measurable by the program being "completed". Measurable success will be based on a notable reduction of injuries and deaths caused by the absence or misuse of child passenger safety seats and bicycle helmets by the end of 2005.

#### 1. Issue/Need/Weakness (D)

Adequate funding for the prevention program activities of West Region EMS and Trauma Care Council continues to be an issue, though the council has been able to execute and support some strong programs with the funds currently available. The fiscal year 2004 budget allocates

West Region 04-05 Trauma Plan Submitted to DOH: 10/15/03 \$22,500 of primary funds for use within this program, not including the salary costs and other expenses associated with having a .5 FTE program coordinator.

#### 2. Goal (D)

Adequate funding is available to the injury prevention and public education program in order to expand the amount and quality of staff time spent, and to increase the amount given to county coalitions and other projects that fall within the committee's identified criteria.

#### Objective

Pursue at least two additional funding sources in FY04, such as corporate and foundation grants, and additional DOH grants that could supplement funding received by the Department of Health, which is allocated by the West Region Council.

#### Strategy

Monitor relevant sources for possible funding opportunities, and apply as staff time allows.

#### Costs

The cost for this goal includes staff time and resources used while pursuing funding sources.

#### **Barriers**

The main barrier expected is not having the time to pursue a particular opportunity when it comes along, due to other more pressing tasks and responsibilities.

#### 3. Activity Measurement (D)

Success in this case will be measured strictly on funds available for use on injury prevention and public education activities. The effort will be successful if the West Region is able to devote more staff time and quality to this program as well as contribute more funds to new and existing programs within the region.

# IV. PREHOSPITAL

### A. Communication

For current practices, refer to:

Council Operating Policy #1: System Access, Council Operating Policy #2: Communications,

Council Operating Policy #3: Dispatch,

Patient Care Procedure #1: Medical Command at the Scene,

Patient Care Procedure #7: EMS/Medical Control-Communications.

#### 1. Issue/Need/Weakness

Communications systems continue to function on a regular basis in the region, however there is concern over how multiple patient, mass casualty, or other disaster incidents will strain systems in place, as demonstrated by the Nisqually earthquake in 2001.

For single patient, multiple patient and mass casualty patients, communication is designated by the frequency assigned by dispatch. For disaster incidents on the county or state level, there are plans in place that designate how communications will be established, yet not all agencies have the same communications capabilities. Ambulance to ambulance communication is assigned a frequency by dispatch, as well as ambulance to dispatch. Ambulance to hospital communications is most frequently done via cell phones.

During the 2001 Nisqually earthquake, internet connection, HEAR radio, HAM radio and/or face-to-face communication rapidly turned out to be the only available means of communication for certain time periods while primary systems were down. Communication system surveys are listed by county in Table A. Backup communications systems need to be established that can be utilized by multiple agencies.

No problems have yet been identified relating to public access to dispatch, training for dispatch personnel, or provisions for bystander care with dispatcher assistance.

#### 2. Goal

An effective West Region communications system results from cooperative efforts with other agencies involved in the EMS and trauma care system. The groundwork for this goal has begun through efforts to develop a regional hospital response plan to bioterrorism or other large-scale mass casualty incidents. Both public and private agencies are taking part in this ongoing dialogue. Communication systems are a key component of that plan.

#### Objective #1

Contribute to the development and implementation of a statewide communications system, which is currently being led by staff at Harborview Medical Center and focused on hospital communications. Council officer or staff member to attend at least one relevant meeting in each year of the biennium.

#### Strategy

The West Region will continue to work in coordination with developers of a statewide communication system for use by all agencies involved in the EMS and trauma care system. Currently, the system includes a website that maintains hospital and other facility capacity information throughout the day. Efforts continue to create a radio system that will work consistently across the state of Washington. Cost has been one barrier to completion of this system, though individual regional councils have not yet been drivers of the system, thus the costs have not fallen directly upon them. Another barrier that exists is that of geographical features which make consistent communication difficult. The West Region is made up of foothills, valleys, and large areas of open water. Such features and others are found throughout the state, which have formerly presented difficulties with other methods of communication, including the VHF-HEAR system and cellular phones.

#### Objective #2

Continue to encourage regional dialogue about communication issues among emergency management, communications centers, prehospital EMS, fire districts and hospitals. West Region Council Chair to place on agenda for regional Council meeting before June 2004.

#### Strategy

Build upon relationships established through recent efforts to create a regional hospital bioterrorism response plan. Costs are expected to be minimal. The only expected barrier is one of complacency; if for example, agencies involved presume how response will occur without verifying assumptions with other agencies within the region.

#### Costs

No funds are currently available to assist in statewide communications planning, though some opportunities may arise from the bioterrorism preparedness planning efforts. Costs for encouraging on ongoing regional dialogue regarding communications are expected to be minimal.

#### **Barriers**

Cost is the largest barrier to contributing to statewide communication efforts. No barriers are expected with encouraging a regional dialogue.

# EVALUATION OF COMMUNICATION SYSTEM PROVIDERS & DISPATCH ACTIVITIES

# **THURSTON COUNTY**

	Survey Questions	Dispatch Responses
1	Citizen Access	9-1-1 and business line
2	Consolidated Centers	1
3	Number of Employees	51.5 (42 in call center)
4	Number of Employees Not Trained	None, all employees have some level of training.
5	Kinds of Training	-1 year CTO Program: in-house training, new hire, call receiver, data channel/city police/county police/fire -WCJTC Telecommunicator I, II -ACCESS Level II Certification -Criteria Based Dispatch (CBD) Certification
6	Frequency of Training	Quarterly
7	On-going Training & Certification	ACCESS Level II, CBD
8	Kinds of Protocols	SOP Manual, Training Manual, individual department protocol responses
9	Medical Director Involvement	CBD design/update
10	Dispatch Prioritizing	Fire Liason Committee and Law Enforcement Councils set standardized priorities by call types
11	Bystander Care	CID for staff; protocols for handling various incident types
12	Pre-arrival Instructions	CBD & Protocols
13	Quality Assurance	-Monthly review of fire/police priority 1 calls, calls out of compliance with 90 second rule -CBD Committee

Enhanced-911 (E-911) is available to residents in Thurston County. Thurston County has a centralized call-receiving center and central dispatch.

# EVALUATION OF COMMUNICATION SYSTEM PROVIDERS & DISPATCH ACTIVITIES

### **PIERCE COUNTY**

	Survey Questions	Dispatch Responses
1	Citizen Access	9-1-1and designated numbers
2	Consolidated Centers	3, FireComm, Puyallup City Communications, and
		American Medical Response (AMR)
3	Number of Employees	64 combined
4	Number of Employees Not	17 combined
	Trained	
5	Kinds of Training	EMD, equipment training, and CBD
6	Frequency of Training	Weekly, recert. every 2 years, monthly for CBD
7	On-going Training & Certification	Yes
8	Kinds of Protocols	CBD, EMD, Fire protocols
9	Medical Director Involvement	Yes, development and approval of CBD, no for AMR
10	Dispatch Prioritizing	By ALS & BLS
11	Bystander Care	Yes
12	Pre-arrival Instructions	Yes
13	Quality Assurance	Yes, but not by Puyallup City Communications

In Pierce County, 911 EMS calls are routed to one of six dispatch centers: American Medical Response, Buckley Dispatch, FireComm (Lakewood); Madigan Army Medical Center, Puyallup City Communications, and Tacoma Fire Department. Over 90 percent of Pierce County calls are dispatched through FireComm and the Tacoma Fire Department.

# EVALUATION OF COMMUNICATION SYSTEM PROVIDERS & DISPATCH ACTIVITIES

# **LEWIS COUNTY**

	Survey Questions	Dispatch Responses
1	Citizen Access	9-1-1
2	Consolidated Centers	Lewis County is in consolidated PSAP
3	Number of Employees	18 trained in CBD- King County
4	Number of Employees Not	0
	Trained	
5	Kinds of Training	EMD, Telecommunicator 1 or 2, APCO
6	Frequency of Training	2x per year, T1 & T2 recertification every 3 years
7	On-going Training & Certification	In-service 2x per year
8	Kinds of Protocols	ALS, BLS
9	Medical Director Involvement	MPD for EMD & he does in-service training
10	Dispatch Prioritizing	Yes
11	Bystander Care	EMD
12	Pre-arrival Instructions	EMD
13	Quality Assurance	In-house review of ALS upgrades

Enhanced-911 (E-911) is available to residents of Lewis County. Lewis County has a centralized call-receiving center and central dispatch.

# EVALUATION OF COMMUNICATION SYSTEM PROVIDERS & DISPATCH ACTIVITIES

### **GRAYS HARBOR COUNTY**

	Survey Questions	Dispatch Responses
1	Citizen Access	9-1-1 and business lines
2	Consolidated Centers	1
3	Number of Employees	19
4	Number of Employees Not	3
	Trained	
5	Kinds of Training	TTY, Surf Rescue, CPR/First Aid, EMD recert.
6	Frequency of Training	Every month, every month, every 3 years, every 2
		years, respectively
7	On-going Training & Certification	Yes, review by EMD trainer
8	Kinds of Protocols	MPD created protocols
9	Medical Director Involvement	Yes, reviews procedure changes, including directions
		given and questions asked by telecommunicators
10	Dispatch Prioritizing	Dispatches are not prioritized
11	Bystander Care	Yes
12	Pre-arrival Instructions	Yes
13	Quality Assurance	Yes

GRAYS HARBOR COUNTY: Enhanced-911 (E-911) is available to residents in Grays Harbor County. Grays Harbor County has a centralized call-receiving center and central dispatch.

# EVALUATION OF COMMUNICATION SYSTEM PROVIDERS & DISPATCH ACTIVITIES

### **NORTH PACIFIC COUNTY**

	Survey Questions	Dispatch Responses
1	Citizen Access	E9-1-1
2	Consolidated Centers	1
3	Number of Employees	10
4	Number of Employees Not	0
	Trained	
5	Kinds of Training	EMD
6	Frequency of Training	Every two weeks
7	On-going Training & Certification	Yes
8	Kinds of Protocols	Claussen System
9	Medical Director Involvement	Yes, through review and signature, no direct
		involvement
10	Dispatch Prioritizing	Alpha, Bravo, Charlie, Delta is the furthest they
		prioritize, no other system is used
11	Bystander Care	Yes
12	Pre-arrival Instructions	Yes
13	Quality Assurance	Yes

N. PACIFIC COUNTY: Raymond Fire Department receives and dispatches EMS calls for N. Pacific County (the Pacific Ambulance District). This includes the city of Raymond and the surrounding Fire Districts #1/Ocean Park, #3/Willapa Valley, #6/Bay Center, #7/Nemah and South Bend Fire Department. Fire District #5/North Cove & Tokeland is dispatched through Grays Harbor Communications.

# B. Medical Direction of Prehospital Providers

For current practices, refer to:

Patient Care Procedure #1: Medical Command at the Scene

Patient Care Procedure #7: EMS/Medical Control-Communications.

#### 1. Issue/Need/Weakness (A)

While all county Medical Program Directors (MPD's) continue to be committed and are very active at the local county levels, they continue to have limited time to devote to regional meetings and activities.

#### 2. Goal (A)

County Medical Program Directors fully participate in the regional EMS and trauma care system.

#### **Objective #1**

Encourage and see an increase in active MPD presence and participation in Council meetings, the West Region QI Forum, and the annual EMS Conference sponsored by the West Region by June, 2004.

#### Strategy #1

Consult with MPD's about their time constraints to find meeting times and days that work best with their schedules. The main barrier expected is the difficulty inherent in meshing multiple conflicting schedules.

#### Strategy #2

Encourage MPD attendance at the West Region EMS Conference as participants and/or presenters. Cost for travel and honorarium to conference when accepted is generally about \$500, which is not considered a barrier.

#### 1. Issue/Need/Weakness (B)

The West Region Joint Medical Review, Planning and Standards Committee has not met since 1999. This committee is tasked with the development and implementation of the regional trauma system plan including its annual review, development of regional patient care procedure guidelines, as well as the general operating procedures for the Council.

### 2. Goal (B)

A Joint Medical Review, Planning and Standards Committee meets regularly to discuss the continuing system development and implementation needs of the regional system and develop and recommend regional patient care procedures, guidelines and general operating procedures for the Council.

#### **Objective #1**

Create a dialogue with county Medical Program Directors to determine the goals of this committee, in order to emphasize its necessity. Contact will be made with all four MPDs before January 2004.

#### Strategy

Set up a business planning meeting with all county MPD's to discuss committee.

#### **Objective #2**

Establish regular meeting dates for re-established committee before January, 2004.

#### Strategy

Set bi-annual to quarterly meetings for the Committee to meet, beginning in 2004 so that the Committee is fully re-established by the beginning of FY05.

#### Costs

Costs for these activities are minimal and can be absorbed by the Council.

#### **Barriers**

The primary barriers will be lack of time and interest on the part of some Medical Program Directors.

# C. Prehospital EMS and Trauma Services

Current prehospital personnel numbers are listed in Figure 3.

Currently available training resources are listed in Figure 4.

#### 1. Issue/Need/Weakness (A)

The Council relies on local fire departments and EMS agencies to bring forward their concerns regarding personnel resources. The Council is not aware of any EMS personnel resource issues within the region at this time.

#### 1. Issue/Need/Weakness (B)

The region is in need of continued Ongoing Training and Evaluation Program (OTEP) and Continuing Medical Education (CME) for all EMS providers within the region.

#### 2. Goal (B)

The needs of the OTEP and CME within the West Region are supported by the Regional Council.

#### **Objective #1**

Provide partial funding to support OTEP and CME annually.

#### Strategies:

- Contract annually with local county EMS council or designated representative to coordinate and conduct CME and OTEP at the local level
- Provide training through annual West Region EMS Conference sponsored by the Council.
- Co-sponsor pediatric in-service with Mary Bridge Children's Hospital for paramedics and RNs.
- Sponsor PHTLS and/or PALS equivalent.

#### Objective #2

Promote regional role as an information clearinghouse about CME scheduled at local agencies, and track usage in order to measure impact by June 2004.

#### Strategy #1

Develop training calendar on web site by June 2004.

#### Costs

Costs for these activities are close to those already incurred by supporting county training programs.

#### **Barriers**

Barriers may include time constraints and compliance by instructors.

#### 1. Issue/Need/Weakness (B)

An ongoing issue is the need to support initial BLS training in parts of the region.

#### 2. Goal (B)

Partial funding and/or support to counties that express need for initial BLS training is supported by the region.

#### **Objective**

Counties to submit needs for support and/or funding for initial BLS training within the biennium.

#### Strategy #1

The Training, Education & Development Committee (TED) reviews requests for funding and forwards to the Council for approval.

#### Costs

Costs will be incurred. Where needed, prior proceeds from the EMS Conference fund can be utilized for training purposes within the region.

#### **Barriers**

The primary barrier is to ensure available funds.

#### 1. Issue/Need/Weakness (C)

Quality improvement for EMS instructors/evaluators for all levels of training (CME, OTEP and initial) is an ongoing need of the region.

#### 2. Goal (C)

EMS Instructor/Evaluator training and evaluations of instructors is supported by the Regional Council.

#### **Objective**

Assist counties with initial and other BLS instructor/evaluator workshops, as requested during each year of the biennium.

#### **Strategies**

- Assist counties with funding or administrative support for initial BLS instructor/evaluation training, as recommended by the TED Committee
- ➤ Offer EMS instructor development session at annual EMS conference in February 2004 and 2005.
- Assist counties with implementing changes for SEI certification as required by WAC 246-976-031, on request.

#### Costs

Costs will be incurred. Where needed, prior proceeds from the EMS Conference fund can be utilized for instructor development within the region.

#### **Barriers**

The primary barrier is expected to be financial impact upon the region.

# FIGURE 3

# **Prehospital Personnel in the West Region**

	FR	EMT	IV	AW	IV/AW	ILS	ILS/AW	PM	Total
GRAYS HARBOR	83	191	38	0	0	0	0	53	365
LEWIS	12	210	3	0	0	0	6	26	257
N. PACIFIC	30	42	6	0	0	0	0	5	83
PIERCE	43	1351	8	0	0	0	0	317	1719
THURSTON	24	357	1	0	0	0	0	49	431
Total Region	192	2151	56	0	0	0	6	450	2855

<u>Acronyms:</u> FR-First Responder, EMT-Emergency Medical Technician, ILS-Intermediate Life Support, AW-Airway, IV-Intravenous, PM-Paramedic

Source: Dept. of Health, Office of Medical and Trauma Prevention, Licensing and Certification, 2003.

# FIGURE 4

# **Prehospital Training Resources in the West Region**

	EMT Initial & Recert	EMT-P Initial & Recert	OTEP & CME	First Responder	Trauma
Bates Technical College	✓		✓		
Centralia College	✓		✓		
Grays Harbor College	✓		✓		
Grays Harbor EMS Council	✓	✓	✓	✓	✓
Pierce College	✓		✓		
Pierce County EMS Office	✓		✓	✓	
Raymond Fire Department	✓		✓	✓	✓
Tacoma Community College	✓	✓	✓		<b>✓</b>
Tacoma Fire Department	✓	✓	✓	✓	
Thurston County Medic One	✓		✓	✓	
West Region EMS/TC Council			✓		<b>✓</b>
Individual Instructors	✓		✓	✓	✓
In-house Training			✓	✓	

West Region 04-05 Trauma Plan Submitted to DOH: 10/15/03

# D. Verified Aid and Ambulance Services

County fire district maps are included as Appendix A.

Current Min/Max numbers for trauma-verified prehospital services are listed in Table B.

Currently licensed and/or verified EMS services are listed in Figure 5.

Additional fire district boundary maps are available in the West Region office.

#### 1. Current Status

#### Grays Harbor and N. Pacific Counties

- Grays Harbor Communication: Service area includes Grays Harbor County and Tokeland/N. Cove in North Pacific County.
- ❖ Pacific Communications (PACCOM): All of Pacific County except Tokeland/N. Cove.

Pacific County contracts with the North Pacific EMS Council of Government to administer levy funding for the Pacific County Ambulance District that serves most of North Pacific County. Raymond Fire Department is the lead responding agency for this ambulance district.

The geographic description for North Pacific County is the northern half of Pacific County with the southern border at the Middle Nemah Bridge at Mile Post 35. The northern borders are the Lewis County Line on Highway 6 at Mile Post 25 and the Grays Harbor County Line at Mile Post 67. Raymond Fire Department has an agreement with Aberdeen Fire Department to respond to highway accidents to Mile Post 71, and an agreement with North Cove Fire District #5 to respond to Mile Post 17 on Highway 105 (toward Tokeland).

At this time, Raymond Fire Department responds to five of the small fire districts that surround the City of Raymond: Ocean Park (#1), Willapa Valley (#3), Bay Center (#6), Nemah (#7), South Bend (City and Rural South Bend #8). Most of the volunteers in those outlying areas are First Responders. An ongoing goal is to train some of those volunteers up to the EMT level. This would be the area's first step towards having some ILS personnel that could respond ahead of the ambulance that comes from Raymond. Most of these response times are more than 30 minutes.

#### Lewis County

The 9-1-1 provider for the entire county is the Lewis County E9-1-1/Communications Center.

Lewis County is a primarily rural county covering an area of approximately 2,500 square miles with only two population centers that exceed a population of 7,000, those being the cities of Centralia and Chehalis. Most communities in Lewis County are located along Interstate 5 or US Highway 12. Both highways are significant routes of travel and commerce within Western Washington.

BLS services are reasonably well placed in Lewis County and are functioning adequately with some exceptions relative to response time. Full time ALS services are concentrated in the NW portion of western Lewis County and have been added in the southern and central portions of the

county. ALS services are absent in the eastern portion of the county, though this situation is currently being examined for expansion of service.

In Centralia and Chehalis, paid fire fighters provide first response emergency medical services with primary medical transportation being provided by a privately owned ambulance company. Centralia Fire Department provides ALS first response care while Chehalis Fire Department provides BLS. In the rural areas adjacent to Centralia and Chehalis, Fire Districts provide BLS and ALS first response with primary medical transportation being provided by the aforementioned private ambulance company.

The next ring of fire districts in Lewis County are staffed almost exclusively by volunteers and provide BLS first response and medical transportation. The exception is a 24 hour paid ALS unit serving Toledo, Winlock and Vader Fire Districts. All Fire Districts that provide medical transportation west of Mossyrock have ALS intercept contracts with the southern and central units where the paramedic unit meets and boards the fire district ambulance while en route to the receiving medical facility.

Fire Districts east of Mossyrock provide BLS first response and medical transportation. No ALS is currently available and limited ILS is present in the Randle-Packwood areas.

In total there are 4 city fire departments and 18 fire districts located in Lewis County. Some cities and fire districts have service contracts creating one fire department. Currently, 15 of 18 fire districts provide BLS services, 3 provide ALS services, and 13 provide medical transportation. Of the 4 city fire departments, 3 provide BLS services and 1 provides medical transportation. The fourth city, Centralia, provides ALS first response and backup medical transportation. One private ambulance company stationed in Centralia and Chehalis provides inter-facility transports and ALS-BLS 9-1-1 system transportation.

Advanced Life Support ambulances in Lewis County are regulated by a county ordinance that is administered by the county health department. Definitions for urban, suburban, rural and wilderness are either consistent with those contained in WAC, or more stringent. For example, urban in Lewis County is described as incorporated cities with a population in excess of 5,000. Had this change not been made Centralia and Chehalis would fall under the suburban classification by DOH state licensure definition.

#### Pierce County

Prehospital response area boundaries are identified by fire districts/municipalities and are dispatched by the centers listed below:

- Buckley Dispatch: The City of Buckley, Pierce County Fire Districts # 12, 25, and 26, and the Town of Cardonado.
- Tacoma Fire Department Communications Center: The City of Tacoma, City of Fife, City of Firerest, and Fire Dist. #10.
- Madigan Army Medical Center (MADCOMM): McChord, Ft. Lewis, Camp Murray and designated primary response areas such as Dupont/I-5 exit 120 NB to 114SB/Tillicum and Woodbrook for Medical. The Ft. Lewis Fire Department covers Ft. Lewis area and Camp Murray while Military Police cover Ft. Lewis area only.
- FIRECOMM: Fire District #'s 1, 2, 3, 4, 5, 6, 8, 13, 15, 16, 17, 20, 21, 22, 23, 27, 42, 43, 46, and 48. In addition, dispatches to the City of Lakewood, University Place, Bonney Lake, Edgewood, Roy, South Prairie, Dupont, Eatonville, Ruston and Steilacoom.

- Puyallup City Communications: City of Puyallup, Pierce County Fire Dept. # 11 & 14, and the City of Milton.
- Rural/Metro Ambulance: Service area is King, Snohomish and Pierce Counties (they do not receive 9-1-1 calls directly).
- American Medical Response: Pierce County

The Pierce County EMS Council began implementing a plan to: 1) define population density for Pierce County; 2) match the service area types (Urban, Suburban, Rural, Wilderness) with the EMS providers in that area; and 3) gather current response times from those providers. This process continues as fire districts/municipalities merge/separate, and as growth continues in rural areas of the county.

#### Thurston County

A detailed spreadsheet can be obtained from the West Region office that provides relevant data by jurisdiction: responses, verified trauma unit WAC requirements, and time/number comparisons over successive years.

Thurston County Communications (CAPCOM, is the 911 dispatch center for the entire county. Providence Saint Peter Hospital Emergency Department is the County Base Station.

The Thurston County EMS and Trauma Care Council reviews ALS medical unit response times by jurisdiction. The EMS Council contributes to placement decisions for new Medic Units based on ALS EMS demand and trauma verification requirements. Medic Units are responsible for ALS response and transport. The EMS Council has control of Medic One/ALS funding and contributes to decisions regarding ALS & BLS level response.

The Thurston County EMS and Trauma Care system is in the process of implementing a long range plan. The emphasis of the plan is to improve effectiveness and efficiency within its ALS system. The plan is to decrease the number of ALS provider agencies contracted for countywide ALS service to improve the efficiency and the efficacy of paramedic level care. The Council seeks to train medics as effectively and efficiently as possible, so will decrease the number of ALS service provider agencies (not number of ALS units) in order to provide for rotation of personnel between higher volume urban and lower volume rural ALS services in the County EMS system.

All ALS and BLS response and transport agencies are Trauma Verified. BLS response is provided by each Fire jurisdiction. BLS transport is generally provided by private ambulance services (AMR and Olympic Ambulance Companies). A consortium of Fire agencies (FD#9 Mclane, FD#5 Black Lake, FD#11 Littlerock, FD#1 Rochester) are providing BLS transport to 9-1-1 calls in their respective jurisdictions.

All interfacility BLS transports are handled by private ambulance. Airlift Northwest and private ambulances handle critically acute ALS interfacility. Medic One acts as a default for critically acute ALS interfacility based on patient need and availability of those services, with Base Station authorization.

#### 2. Issue/Need/Weakness

Funding resources at the local as well as regional level continue to be an issue. Agencies attempting to comply with present state mandates in order to maintain verified status are often without the funds to do so. The regional council has occasional, but not steady opportunities to seek funding to pass through to individual agencies or departments, depending on the need.

#### 3. Goal

Special funding sources increase the region's ability to assist West Region agencies or departments in need. During 2002 and into 2003, West Region EMS has been able to take part in a statewide Rural Access to Emergency Devices grant application through the federal Office of Rural Health Policy of the Health Resources and Services Administration, Department of Health and Human Services. This grant program, once fully implemented, will as a priority place automatic external defibrillators (AED's) in department vehicles that are not yet in compliance with the state mandate requiring them to have them.

#### **Objective #1**

Monitor and apply for at least one grant opportunity presented through the State Department of Health and Federal agencies in FY04.

#### Strategy

Get included on federal and state emailing lists that update agencies on state and federal funding opportunities and pursue those that are feasible and appropriate. The main barrier expected is not having the time to pursue a particular opportunity when it comes along, due to other more pressing tasks and responsibilities.

#### **Objective #2**

Actively pursue other funding sources, such as grants through corporate and community foundations, which are specific to equipment and other departmental needs.

#### Strategy

Apply to granting agencies in FY04. The main barrier expected is not having the time to pursue a particular opportunity when it comes along, due to other more pressing tasks and responsibilities.

#### Costs

The cost for this goal includes staff time and resources used while pursuing funding sources.

#### **Barriers**

The primary barrier is that of staff time to devote to pursing funding sources.

### **VERIFICATION**

West Region January 2003

#### **Thurston County**

Min/Max Numbers for Trauma-Verified Prehospital Services

#### Instructions:

- a. List the current DOH-approved number of prehospital verified services within the region by county.
- b. Using the information identified in the narrative above regarding the need and distribution process for each county, specify the regionally- recommended minimum/maximum number of prehospital verified services within the region, by county.
- c. List the current number of services verified at each level, as identified in the need and distribution section.
- d. Submit a completed Table B for each county

**NOTE:** Only a number or a zero may be entered as a recommendation in each of the blanks below, and each blank must contain either a number or a zero.)

Services	STATE APPROVED		CURRENT STATUS		PROPOSED inges with an *)
	MIN	MAX		MIN	MAX
Aid - BLS	8	8	9	8	8
Aid - ILS	0	1	0	0	1
Aid - ALS	0	1	0	0	1
Amb-BLS	7	9	6	7	9
Amb - ILS	0	1	0	0	1
Amb - ALS	1	4	5	1	4

**NOTE:** No changes recommended (pending final approval from Thurston County EMS Council).

West Region 04-05 Trauma Plan Submitted to DOH: 10/15/03

# **VERIFICATION**

West Region January 2003

#### **Pierce County**

Min/Max Numbers for Trauma-Verified Prehospital Services

#### Instructions:

- a. List the current DOH-approved number of prehospital verified services within the region by county.
- b. Using the information identified in the narrative above regarding the need and distribution process for each county, specify the regionally- recommended minimum/maximum number of prehospital verified services within the region, by county.
- c. List the current number of services verified at each level, as identified in the need and distribution section.
- d. Submit a completed Table B for each county

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS $\Phi$ $\Omega$	1	14	14	1	14
Aid - ILS	0	0	0	0	0
Aid - ALS $\Phi$	0	10	0	0	10
$\mathbf{Amb\text{-}BLS}\Omega$	1	11	11	1	11
Amb - ILS	0	0	0	0	0
$\mathbf{Amb} \textbf{-} \mathbf{ALS}  \Omega$	1	13	13	1	13

Φ Any current BLS agency may submit a variance request to upgrade to Aid-ALS.

 $\Omega$  Any current Fire Department which provides EMS (city, town, county) may upgrade to Amb-ALS within their own jurisdiction. Any new application from an ambulance service must serve Buckley, PCFD #12, Eatonville, PCFD #15, Roy, McKenna, PCFD #17, Carbonado, Greenwater, PCFD #26, Ashford, Elbe, and PCFD #23.

**NOTE:** No changes recommended.

West Region 04-05 Trauma Plan Submitted to DOH: 10/15/03

## **VERIFICATION**

West Region

January 2003

#### **Lewis County**

Min/Max Numbers for Trauma-Verified Prehospital Services

#### Instructions:

- a. List the current DOH-approved number of prehospital verified services within the region by county.
- b. Using the information identified in the narrative above regarding the need and distribution process for each county, specify the regionally- recommended minimum/maximum number of prehospital verified services within the region, by county.
- c. List the current number of services verified at each level, as identified in the need and distribution section.
- d. Submit a completed Table B for each county

**NOTE:** Only a number or a zero may be entered as a recommendation in each of the blanks below, and each blank must contain either a number or a zero.)

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	8	21	2	8	21
Aid - ILS	0	2	0	0	2
Aid - ALS	0	2	0	0	2
Amb-BLS	11	21	13	11	21
Amb - ILS	1	6	2	1	6
Amb - ALS	1	6	4	1	6

**NOTE:** No changes recommended.

## **VERIFICATION**

West Region January 2003

### **Grays Harbor County**

Min/Max Numbers for Trauma-Verified Prehospital Services

#### Instructions:

- a. List the current DOH-approved number of prehospital verified services within the region by county.
- b. Using the information identified in the narrative above regarding the need and distribution process for each county, specify the regionally- recommended minimum/maximum number of prehospital verified services within the region, by county.
- c. List the current number of services verified at each level, as identified in the need and distribution section.
- d. Submit a completed Table B for each county

**NOTE:** Only a number or a zero may be entered as a recommendation in each of the blanks below, and each blank must contain either a number or a zero.)

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	9	12	11	9	12
Aid - ILS	0	0	0	0	0
Aid - ALS	0	0	0	0	0
Amb-BLS	4	6	3	4	6
Amb - ILS	3	6	1	3	6
Amb - ALS	6	6	5	6	6

**NOTE:** No changes recommended.

## **VERIFICATION**

West Region January 2003

#### **North Pacific County**

Min/Max Numbers for Trauma-Verified Prehospital Services

#### Instructions:

- e. List the current DOH-approved number of prehospital verified services within the region by county.
- f. Using the information identified in the narrative above regarding the need and distribution process for each county, specify the regionally- recommended minimum/maximum number of prehospital verified services within the region, by county.
- g. List the current number of services verified at each level, as identified in the need and distribution section.
- h. Submit a completed Table B for each county

**NOTE:** Only a number or a zero may be entered as a recommendation in each of the blanks below, and each blank must contain either a number or a zero.)

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	3	4	1	3	4
Aid - ILS	0	0	0	0	0
Aid - ALS	0	0	0	0	0
Amb-BLS	0	0	0	0	0
Amb - ILS	0	0	0	0	0
Amb - ALS	1	1	0	1	1

**NOTE:** No changes recommended.

# FIGURE 5

# LICENSED / VERIFIED EMS SERVICES WEST REGION

# **Number of Agencies**

	LICENSED AID	LICENSED AMBULANCE	VERIFIED AID	VERIFIED AMBULANCE	TOTAL
GRAYS HARBOR	0	0	11	10	21
LEWIS	0	2	2	16	20
N. PACIFIC	0	0	1	1	2
PIERCE	0	2	14	20	36
THURSTON	0	0	7	12	19
TOTAL REGION	0	4	35	59	98

#### **Number of Vehicles**

	FIRST AID	GROUND	AIR
	VEHICLES	AMBULANCE	AMBULANCE
GRAYS	30	27	0
HARBOR			
LEWIS	19	44	0
NORTH	3	4	0
PACIFIC			
PIERCE	151	99	0
THURSTON	58	33	0
TOTAL REGION	261	207	0

Source: Washington State Office of Emergency Medical and Trauma Prevention, January 2003

# E. Patient Care Procedures and County Operating Procedures

For current practices, refer to:

Council Operating Policy #6: Prehospital Care- Patient Care Protocols.

#### 1. Current Status

Prehospital patient care procedures (PCP's) are defined in writing and standardized for the entire region in accordance with the West Region EMS Council operating policies, (see Appendices B and C). Annual review of these regional PCP's is the responsibility of the Medical Program Directors (MPD's) as members of the Joint Medical Review, Planning and Standards Committee, and subsequently the Department of Health (DOH). These patient care protocols are on file in each county. Individual provider agencies in the region receive updates of the PCP's.

County operating procedures must at least meet the minimum regional standard, and if they exceed the standard they must be reviewed by the Council and approved by DOH before implementation. To date, all West Region counties adhere to the regional PCP's.

The regional PCPs are working well. No issues/needs/weaknesses currently exist. No changes have been recommended to currently adopted PCP's. West Region EMS continues to educate providers about the definition and role of regional patient care procedures, county operating procedures and council operating policies.

# F. Multi county or county/inter-regional Prehospital Care

#### 1. Issue/Need/Weakness

The West Region has no inter-regional patient care procedures at this point. Patient flow patterns relative to trauma determine where patients will be received based on the severity of injuries and special needs.

#### 2. Goal

Patient care procedures meet county or intra-regional needs for prehospital care.

#### Objective

Determine whether there is a need to establish inter-regional patient care procedures by June 2004.

#### Strategy 1

Initiate dialogue at least once during 2004 among counties and surrounding regions about differences in patient care protocols and to determine the need for inter-regional procedures.

#### Strategy 2

Delegate the West Region MPD, Planning & Standards Committee to approach the topic and facilitate the dialogue.

#### Costs

Costs are minimal to conduct this survey of need.

#### **Barriers**

No barriers are perceived for pursing a dialogue within the region.

# V. DESIGNATED TRAUMA CARE SERVICES

#### A. Issue/Need/Weakness

There continues to be a shortage of emergency room, ICU and critical care nurses in the West Region.

#### B. Goal

The number of trained emergency department, ICU and critical care nurses meets designated trauma care service needs in the West Region.

#### **Objective #1**

Continue vital participation in and look to expand the activities or membership of the West Region Emergency Nursing Education Cooperative by June 2004. The cooperative is a group of hospitals in the West Region that developed a program to train nurses interested in entering clinical practice in the emergency room. Cooperative members present 80 hours of didactic instruction, and students also receive certifications in PALS-equivalent, ENPC and TNCC. The program is very cost effective for the cooperative members.

#### Strategy

The West Region EMS Council along with the Emergency Nursing Education Cooperative sponsors courses to help facilities meet designation requirements in WAC for education of trauma and ICU nurses. Ten to 15 courses are offered throughout the year in various locations. The West Region will work to expand the number and location of courses throughout the year as is financially possible. The funds needed to offer the courses are met by course revenues when classes are full. Working to expand the number and locations of courses will depend highly on interest in particular areas of the West Region.

#### Objective #2

Continue to sponsor Emergency Nurses Association courses to students in the West Region. Courses to include Trauma Nursing Core Course, Emergency Nursing Pediatric Course, and Course in Advanced Trauma Nursing. Sponsor at least one ICU/CCU education course by June 2004.

#### Costs

Costs incurred from holding the courses are offset by a slight profit from the activity.

#### **Barriers**

Increasing the number of courses held will require additional staff time to facilitate, which could become a barrier depending on office staffing. Finding suitable training facilities may prove difficult as more facilities within the West Region are charging usage fees.

#### C. Designated general, pediatric and rehabilitation trauma facilities

The original Council recommendations for trauma center designation were based on onsite visits, hospital interest and ability, trauma patient transfer, 1990 census information, and geographic location. Trauma patient volume was projected to be two cases per 1000 population per year. This was based on the Arthur Anderson cost reimbursement study (which is based on CHARS data), the West Region Hospital Trauma Survey and actual trauma discharges, with an adjustment for "first day" deaths and transfers out of the region.

The plan groups trauma patients for 1) minor, moderate, and severe/critical injury; and 2) adult (≥16 years) and pediatric. An adult Step 1–Step 2 patient will usually go to a Level I or II unless those are more than 30 minutes away, in which case the patient will go to the closest level III or IV (in that order) if one is within 30 minutes. Any Step 1–Step 2 trauma patient will be a candidate for helicopter pickup. The planning method used for recommending trauma centers is presented in greater detail in the West Region Hospital Trauma Study (available on request from the West Region office).

The Tacoma Trauma Service started up in June 2000. The original patient volume projections were 500-700 patients per year. This projection was revised to 1200-1500 patients by the end of their first year of operation. Total trauma divert time has been less than 2% of the total time in operation. Community specialists have been called in to consult with trauma surgeons on about 50% of the patients. This has often allowed them to retain care of patients locally. More specific details are available in the Adult Trauma System Report which can be viewed at: http://www.co.pierce.wa.us/abtus/ourorg/dem/EMS/TraumaStatRpt.htm

The West Region trauma plan is designed to be inclusive in the rural areas and exclusive in the more populated urban areas. This approach is safe from a patient care standpoint and cost—effective in minimizing unnecessary duplication of services. For this reason, all rural centers are currently in the plan. In the metropolitan areas of Tacoma and Olympia, in addition to the levels II and IIIs, the Level IVs and non-designated hospitals will assist in system coordination, serve as backup in times of disaster and mass casualty incidents (MCIs), as well as participate in education and quality improvement within the system.

Designated trauma center representatives provide leadership for the West Region Quality Improvement Forum per WAC 246-976-910, see Appendix E. The majority of healthcare services in the West Region participate in the QI Forum. Monitoring trauma centers falls within the purview of DOH.

During 2002, Centralia Providence went from a level IV designation to the level III. Current levels of designation are meeting regional needs. See Table C.

# **TABLE C**

# **WEST REGION**

# FY 04/05 Regional Plan

# Min/Max Numbers for Acute Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
II	2	3	2 (1 joint)	2	3
III	1	6	4	1	6
IV	2	8	4	2	8
V	1	1	1	1	1
IIP	1	1	1	1	1
IIIP	0	0	0	0	0

**NOTE:** No changes recommended.

# Min/Max Numbers for Rehabilitation Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION P (Indicate chan	
	MIN	MAX		MIN	MAX
II	3	4	2	3	4
+	1	5	1	1	5

There are no restrictions on the number of Level III Rehab Services

**NOTE:** No changes recommended.

# VI. DATA COLLECTION AND SUBMISSION

According to the State Trauma Registry, all designated trauma hospital facilities in the West Region are submitting data to the Trauma Registry. Some non-designated facilities are participating as well. In addition, prehospital data collection at the state level started to slow in 2000 and has stopped as of 2002. Prehospital providers are encouraged to submit data to receiving trauma services, which then submit the data to the State Trauma Registry.

Figure 6 summarizes hospital trauma data submissions from the West Region over the last four years. Data for 2002 was not yet available as this plan was produced.

#### 1. Issue/Need/Weakness

As noted above, regional trauma services are to collect and submit data to the State Trauma Registry, included data submitted to them from prehospital providers. At this time, there is not full participation in this data collection effort. As a result, any data collected about the region is incomplete.

#### Goal

All EMS agencies routinely provide complete data to trauma care services within the West Region to enable comprehensive system evaluation.

#### **Objective**

Encourage and support collection and submission of EMS and trauma care service data to the State Trauma Registry by identifying those EMS agencies that do not regularly take part and assist them where needed

#### Strategy #1

Collaborate with trauma nurse coordinators to identify agencies not regularly reporting.

#### Costs

Costs are expected to be minimal.

#### **Barriers**

The primary barrier will be that of encouraging non-compliant agencies to take part.

# FIGURE 6

# **HOSPITAL TRAUMA DATA SUBMISSIONS**

# **WEST REGION**

Hospital	1998	1999	2000	2001	Total
St Joseph Tacoma	105	122	496	718	2096
Willapa Harbor	8	6	8	9	48
Grays Harbor	98	80	120	152	608
Good Samaritan	79	127	113	130	718
St Clare	53	91	114	163	585
Providence St Peter	238	208	354	267	1356
Morton General	21	58	57	11	188
Mary Bridge	164	305	338	303	1785
Tacoma General	0	0	400	678	1264
Mark Reed	4	63	47	123	237
Providence Centralia	47	102	128	156	583
Capital Medical Center	0	53	53	62	168
Madigan	14	211	198	138	733
Total	831	1426	2426	2910	10369

Source: State Trauma Registry, June 2002.

# VII. EMS AND TRAUMA SYSTEM EVALUATION

For current practices, refer to:

Council Operating Procedure #8, Quality Assessment and Improvement.

The West Region Quality Forum was reorganized as the West Region Quality Improvement Forum in 1996 to evaluate the EMS and trauma system within the West Region, under the leadership of designated facilities. This effort is in compliance with their responsibility for regional quality assurance as defined in WAC 246-976-910, see Appendix E. The regional quality assurance plan was approved by DOH in May 1997, revised in March 2001, and revised again in November 2002. The revised Quality Improvement Plan is included here as Appendix D.

Responsibility for the internal quality assurance/quality improvement presentations, individual case presentations, and education is shared among the designated trauma facilities and prehospital agencies. The overall agenda is inclusive of the full continuum of care. The State Trauma Registry data will enhance the efforts to improve trauma patient care. West Region representation to the forum includes the Council Chair, committee chairs, and staff. The region also provides administrative and meeting support.

West Region 04-05 Trauma Plan Submitted to DOH: 10/15/03

# **EMERGENCY MEDICAL SERVICES**& TRAUMA CARE SYSTEM

FY 04-05

# WEST REGION BIENNIAL PLAN

Submitted by: West Region EMS & Trauma Care Council

To: Washington State Department of Health

Date: <u>October 15, 2003</u>



# Appendix A

# County Response Area Maps

Maps available from the West Region Office

# **EMERGENCY MEDICAL SERVICES**& TRAUMA CARE SYSTEM

FY 04-05

# WEST REGION BIENNIAL PLAN

# APPENDIX B COUNCIL OPERATING POLICIES



#### I. SYSTEM ACCESS

#### **OBJECTIVE**

To define an expedient method of accessing trauma care system by victims, bystanders or public safety service.

# **PROCEDURE**

The regional standard shall be for universal access to the trauma system, for having the nearest available response unit dispatched when needed, and for having enhanced 911 in place by 1998 in accordance with the state plan.

#### **TRAINING**

Dispatch training will be required to include emergency medical dispatch and trauma systems accessing. Ongoing training of dispatch personnel will occur. Regionwide community education will focus on how to access the system when needed.

# **IMPLEMENTATION**

The West Region will identify areas not currently serviced by the E911 system. The Council will support and work with the state E911 Office to realize the goal of regionwide E911 access.

# **QUALITY ASSURANCE**

The region will gather and analyze data on dispatch information, response times, activation of trauma teams and any problems related to accessing the trauma system. This data may come from prehospital care forms, as well as other information systems that may be available to the region.

#### II. COMMUNICATIONS

#### **OBJECTIVES**

To define a system for providing care instructions to the caller prior to arrival of prehospital care providers.

To define the system of interfacility communications.

#### PROCEDURE

The regional standard shall be for the dispatcher to provide priority based dispatch (or equivalent) instruction to the caller prior to prehospital provider arrival.

The regional standard shall be for all EMS receiving facilities to have a primary and at least one secondary method of interfacility communications, both landline and non-landline.

#### **IMPLEMENTATION**

Appropriate telephone aid instructions will be given to callers.

Current methods of communication between hospitals will be identified.

# **QUALITY ASSURANCE**

Review of dispatch tapes will be completed by dispatch agencies as needed to ensure appropriate instructions were given.

All trauma and EMS receiving facilities will have written plans for interfacility communication, both landline and non-landline.

#### III. DISPATCH

#### **OBJECTIVE**

To define a system for dispatching the closest appropriate level and number of prehospital care providers to the scene.

#### **PROCEDURE**

Appropriate dispatch will be:

- 1) Verified trauma services dispatched to trauma patients
- 2) Appropriate EMS services dispatched to EMS patients

#### **IMPLEMENTATION**

The closest trauma verified aid/and or verified ambulance service shall be dispatched to respond and/or transport to all known or suspected major trauma patients who meet (or are suspected to meet) Trauma Registry Inclusion Criteria [see Appendix B: Prehospital Trauma Triage (Destination) Procedures].

Trauma Verified Services shall proceed in an emergency mode to all suspected major trauma incidents until which time they have been advised of injury status of the patients involved. There will be communication between the onscene prehospital provider and medical control.

# **QUALITY ASSURANCE**

Both hospital and prehospital providers will evaluate communication methods and dispatch, and report data as needed to the West Region Quality Improvement Forum for further evaluation and trend analysis.

#### IV. PREHOSPITAL CARE: MUTUAL AID

#### **OBJECTIVES**

To assure adequate EMS mutual aid within and across the West Region's boundaries. To develop a mechanism where EMS mutual aid requests are incorporated into dispatch, response, and medical incident command.

#### **PROCEDURE**

The regional standard shall be that all counties in the region have written mutual aid agreements.

# **IMPLEMENTATION**

The county councils will identify those areas where mutual aid agreements are needed and provide assistance in attaining agreements between providers. Identification of mutual aid agreements will be made and available to all trauma care providers.

# **QUALITY ASSURANCE**

The West Region Quality Improvement Forum will evaluate and review mutual aid agreements and the process as needed. Non responses or noncompliance with existing agreements shall be reported by the agency requesting assistance to the Forum for review.

#### V. HOSPITAL RESOURCE: REHABILITATION

#### **OBJECTIVE**

To assure that all major trauma patients have early access to and receive the appropriate physical medicine and rehabilitation services.

#### **PROCEDURE**

Rehabilitation services consultation will be available in each designated Level 1-3 Acute Trauma Facility.

Each designated acute trauma facility will have an individual(s) designated as a Rehab Trauma Coordinator. It is the responsibility of the Rehab Trauma Coordinator to make early contact with each major trauma patient and to facilitate the referral to and/or transfer to, if indicated, to the appropriate Level 1 or Level 2 designated rehabilitation facility services.

#### **IMPLEMENTATION**

The designated trauma rehabilitation providers in the region participate in the system by acquiring and maintaining designation by the Department of Health as a designated Rehabilitation Trauma Facility. Major trauma patients requiring inpatient rehabilitation services will be referred only to designated Rehabilitation Trauma Facilities.

# **TRAINING**

Each designated rehab trauma facility will provide information to the acute care facilities to assure that the acute facilities are knowledgeable regarding access to rehab services. The Level 1 facility(ies) are required to provide outreach to the region regarding rehab issues.

# **QUALITY ASSURANCE**

Quality assurance activities will be conducted under the direction of the West Region Quality Improvement Forum. The rehab Coordinators in the designated trauma facilities will serve on the West Region Quality Improvement Forum.

Any feedback received by the region regarding rehab services will be shared promptly with the facility identified for appropriate action.

# RESOURCES/REFERENCES

- Heath Rehabilitation Center at Good Samaritan Hospital, Puyallup
- Providence St. Peter Hospital Rehabilitation Unit, Olympia
- Providence Centralia Hospital Rehabilitation Unit, Centralia
- St. Joseph Medical Center Rehabilitation Unit, Tacoma

#### VI. PREHOSPITAL CARE: PATIENT CARE PROTOCOLS

# **OBJECTIVE**

To define all prehospital care protocols in the West Region.

#### **PROCEDURE**

There will be standardized treatment protocols developed with the region and accepted as the minimum standard by each county MPD. Prehospital providers will be able to provide the most efficient and optimal use of their level of training and resource regardless of political boundaries within the region.

# **IMPLEMENTATION**

The Standards Committee, in collaboration with the county MPDs, will evaluate the regional prehospital protocols and standardize where possible and appropriate.

# **QUALITY ASSURANCE**

The patient care protocols will be reevaluated by the Standards Committee annually and approved by the MPDs in the region.

#### VII. PREHOSPITAL PROVIDER EQUIPMENT LIST

#### **OBJECTIVE**

To define the minimum equipment requirements for prehospital aid vehicles and ambulances.

# **PROCEDURE**

The regional standard shall be for all licensed aid vehicles and ambulances to be minimally equipped per WAC 246-976-300. These include resuscitation equipment, basic equipment, contagious disease supplies, and medical, orthopedic, and extrication supplies. Pediatric supplies will also be present.

With concurrence of county MPDs, local councils, and regional council, the regional standard for equipment may exceed WAC requirements.

If a regional standard is to be exceeded by the region, that standard shall be identified to DOH/OEMTP. DOH/OEMTP shall notify the region if the standard is to be the responsibility of the state or region for implementation.

#### VIII. QUALITY ASSESSMENT AND IMPROVEMENT

#### **OBJECTIVE**

Identify the method to be used to assess and improve the quality of trauma care in the West Region.

#### **PROCEDURES**

#### Prehospital-

At least quarterly review of specific and appropriate components of the prehospital quality program will be completed under the direction of each county's MPD.

The following standard for quality assurance is intended as a minimal guideline only. All local entities are encouraged to use quality improvement techniques to continuously improve the outcome for those patients we serve.

Cases will be reviewed by the West Region Quality Improvement Forum per the plan, which will be updated as necessary.

#### Hospital-

A quality assurance forum composed of all MPDs, designated trauma facility representatives (nurse and doctor), ALS and BLS representatives from each county, medical control representatives, rehabilitation coordinators, county coroner/medical examiners, and a member from the MAST Committee will review all data analysis and observe trends. Representatives from nondesignated medical facilities, regional education and prevention representatives will be encouraged to participate in the West Region Quality Improvement Forum.

The West Region Quality Improvement Forum will report findings to the West Region Council for appropriate action.

#### **IMPLEMENTATION**

The West Region Quality Improvement Forum began meeting quarterly in January 1994. The Forum currently meets 5 times per year. These meetings are very well attended by those participants listed above and many other interested parties. A medical examiner/coroner report has been developed to analyze trauma deaths in the region by county. The forum agenda includes at least one morbidity and mortality case study each meeting. The State Trauma Registry data will enhance the abilities of regional quality improvement efforts to improve trauma patient care.

# IX. HOSPITAL/PREHOSPITAL EMS PERSONNEL: MINIMUM STANDARDS AND TRAINING

#### **OBJECTIVES**

To identify a minimum regional training standard for hospital and prehospital personnel.

To define designated trauma facility obligations to participate in EMS and trauma care provider training.

#### **PROCEDURES**

Non-Designated Hospital and Ambulance Personnel Standards-In accordance with RCW 18.73.150, the minimum standards for any ambulance operated as such shall operate with sufficient qualified personnel for adequate patient care.

Verified Trauma Services and Designated Trauma Facilities Training and Education-

All EMS providers of trauma verified ambulance services shall have PHTLS or equivalent trauma courses (WAC 246.976). This training shall accrue towards continuing medical education requirements for these providers.

Level I and II designated trauma facilities will be required to participate in prehospital trauma care training for EMS providers. In addition, the West Region strongly encourages level III and IV designated trauma facilities to participate also. All hospitals are encouraged to provide clinical setting and inhospital training. Regional training standards for hospital providers will be in accordance with WAC 246.976.

#### **IMPLEMENTATION**

Perform annual regional training needs assessments.

Schedule adequate training to bring the region into compliance with the WAC, as stated above.

Identify the hospitals in the region which currently participate in prehospital trauma training.

#### QUALITY ASSURANCE

All prehospital trauma verified agencies and trauma care facilities will annually evaluate compliance with training requirements and report to the West Region Quality Improvement Forum.

# EMERGENCY MEDICAL SERVICES & TRAUMA CARE SYSTEM

FY 04-05

# WEST REGION BIENNIAL PLAN

# **APPENDIX C**

# PATIENT CARE PROCEDURES & COUNTY OPERATING PROCEDURES

(Last reviewed: May 2003)



# WHO TO CONTACT

Grays Harbor and N. Pacific Counties

Medical Program Director Daniel Canfield, DO (360) 533 6038

Grays Harbor County EMS Council Jill Bellis (360) 532 2067

Lewis County

Medical Program Director Patrick O'Neill, MD (360) 330 8516

Lewis County FPD #12 Mike Kytta, Chief (360) 736 3975

**Pierce County** 

Medical Program Director Clark Waffle, MD (253) 798 7722

EMS Coordinator Norma Pancake (253) 798 7722

Thurston County

Medical Program Director Joe Pellicer, MD (360) 704 2787

Thurston County Medic One Steve Romines (360) 704 2783

Department of Health

Office of Emergency Medical

and Trauma Prevention Richard Benjamin (360) 236 2828

To request additional copies

West Region EMS & Trauma Care Council (360) 705 9019

(800) 546-5416

# TABLE OF CONTENTS

# Patient Care Procedures Pg.

1.	Medical Command at the Scene	
2.	Responders and Response Times	2-3
	Medical Control - Trauma Triage/Transport	
	Air Transport Procedure	
	Hospital Resource - Interfacility Transfer	
	Prehospital Report Form	
	EMS/Medical Control - Communications	
	County Operating Procedures	Pg
1.	Pierce County	12

# **Patient Care Procedure #1**

#### Medical Command at the Scene

#### **OBJECTIVE**

To define who is in medical command at the EMS scene, and to define line of command when multiple providing agencies respond.

#### **PROCEDURE**

The regional standard shall be for the incident command system to be used at all times. Per the incident command system, medical command will be designated by the incident commander. The medical commander should be the individual with the highest level medical certification who is empowered with local jurisdictional protocols.

Law enforcement will be responsible for overall scene security.

# **QUALITY ASSURANCE**

Departure from this policy shall be reported to the MPD in the jurisdiction of the incident.

#### Patient Care Procedure #2

#### **Responders & Response Times**

#### **OBJECTIVE**

To geographically define urban, suburban, rural, & wilderness, and the required prehospital response time for those areas.

#### **PROCEDURE**

The regional standard for response times and responders shall be in accordance with current WAC 246-976-390 as follows:

Verified **aid services** shall meet the following minimum agency response times for response areas as defined by the department and identified in the approved regional plan:

- (a) To urban response areas: Eight minutes or less, eighty percent of the time;
- (b) To suburban response areas: Fifteen minutes or less, eighty percent of the time;
- (c) To rural response areas: Forty-five minutes or less, eighty percent of the time;
- (d) To wilderness response areas: As soon as possible.

Verified aid services shall provide **personnel** on each trauma response including:

- (a) Aid service, basic life support: At least one individual, first responder or above;
- (b) Aid service, intermediate life support: At least one IV/airway technician; or two individuals, one IV technician and one airway technician;
- (c) Aid service, advanced life support: At least one paramedic.

Verified **ground ambulance** services shall meet the following minimum agency response times for response areas as defined by the department and identified in the approved regional plan:

- (a) To urban response areas: Ten minutes or less, eighty percent of the time;
- (b) To suburban response areas: Twenty minutes or less, eighty percent of the time;
- (c) To rural response areas: Forty-five minutes or less, eighty percent of time;
- (d) To wilderness response areas: As soon as possible.

#### Patient Care Procedure # 2 (continued)

Verified ambulance services shall provide **personnel** on each trauma response including:

- (a) Ambulance, basic life support: At least two certified individuals -- one EMT plus one first responder;
- (b) Ambulance, intermediate life support:
  - (i) One IV/airway technician, plus one EMT; or
  - (ii) One IV technician and one airway technician, both of whom shall be in attendance in the patient compartment, plus a driver;
- (c) Ambulance, paramedic: At least two certified individuals -- one paramedic and one EMT.

#### **IMPLEMENTATION**

Per WAC 246-976-430, each prehospital agency is responsible for collecting and submitting response time documentation within its response area through the State Trauma Registry.

# **QUALITY ASSURANCE**

The response times and all agencies that do not meet the state standard will be reviewed by the West Region Quality Improvement Forum as reported by the State Trauma Registry. Response times will be tracked over a two-year period and the standards reevaluated based on input from the MPDs and responder agencies. Per WAC 246-976-440, the Department of Health shall provide registry reports to all providers that have submitted data.

#### Patient Care Procedure #3

# **Medical Control - Trauma Triage/Transport**

# **OBJECTIVES**

To define the anatomic, physiologic, and mechanistic parameters mandating trauma systems inclusion.

To define the anatomic, physiologic, and mechanistic parameters mandating designated trauma facility team activation.

#### **PROCEDURES**

#### Prehospital Trauma Triage-

Prehospital assessment of injured patients for triage into the trauma system and designated trauma facility team activation will be based on the current approved State of Washington Prehospital Trauma Triage (Destination) Procedures. Patients that meet trauma triage procedures criteria shall be transported to a designated facility as directed by the triage procedures (see Appendix B). Pediatric trauma patients will be transported to designated pediatric trauma facilities as directed by the trauma triage procedures (see Appendix B). Where appropriate the patient may be directed to the nearest appropriate designated trauma center for stabilization and physician evaluation. This may be done by ground or air.

Consider transport of unstable patients to nondesignated facilities capable of appropriately stabilizing the patient's medical needs prior to interfacility transfer of trauma patients to designated trauma facilities. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient will be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility.

County procedures that provide direction to field personnel regarding options when a potential destination facility is on divert are provided in Appendix C: County and Designated Trauma Facility Divert Policies.

### Patient Care Procedure #3 (continued)

#### **Medical Control-**

Medical control will be contacted when possible for all trauma patients as defined above. When BLS/ALS responds, medical control contact should be made as early as possible by BLS/ALS ground personnel for the purpose of medical control and to confirm transport destination. Steps 1 and 2 require prehospital personnel to notify medical control and activate the Trauma System. Activation of the Trauma System in Step 3 is determined by medical control. Patients will be identified by applying orange trauma band to wrist or ankle. Data collection will be coordinated through band identification.

#### PHI or Equivalent-

Designated facilities will calculate PHI or an equivalent. Pediatric facilities will calculate pediatric trauma score.

# **IMPLEMENTATION**

As of March 1, 1996, the region will utilize the resources of designated trauma facilities as they are designated within the region.

Providers will transport trauma activation patients according to the regional trauma facility designation plan as the plan is implemented.

# **QUALITY ASSURANCE**

Per WAC 246-976-430, each prehospital agency is required to participate in the state data system by submitting documentation through the State Trauma Registry on all patients entered into the trauma system. The West Region Quality Improvement Forum will review trauma team activation and surgeon activation, as reported by the State Trauma Registry. This will include procedures and guidelines.

Medical controls will keep accurate recorded communications (log book or tape) for auditing as needed by local communication boards/local EMS councils and MPDs. Departure from this policy will be reported to the West Region Quality Improvement Forum.

#### **Patient Care Procedure #4**

### **Air Transport Procedure**

#### **OBJECTIVES**

To define who may initiate the request for onscene emergency medical air transport services.

To define under what circumstances nonmedical personnel may request air transport onscene service.

To define medical control/receiving center communication and transport destination determination.

To reduce prehospital time for transport of trauma patients to receiving facility.

# **PROCEDURE**

Any public safety personnel, medical or nonmedical, may call to request onscene air transport when it appears necessary and when prehospital response is not readily available. This call should be initiated through dispatch services. In areas where communications with local dispatch is not possible/available, direct contact with the air transport service is appropriate.

Air ambulance activation requires appropriate landing zones are available at or near the scene and at the receiving facility. Consider air transport when:

1) Hoisting is needed; 2) Helicopter transport will reduce the prehospital time to the greatest extent regarding the trauma triage procedures requirements.

Do not consider air transport when transport by helicopter to the receiving facility exceeds 30 minutes and exceeds the time for ground transport to another designated trauma or appropriate receiving facility. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient will be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility as needed. See Appendix D or most current Washington State list of designated trauma care service facilities. Activation of the helicopter does not predetermine the destination.

Steps 1 and 2 require prehospital personnel to notify medical control and activate the trauma system. Activation of the trauma system in Step 3 is determined by medical control.

When BLS/ALS responds, medical control contact should be made as early as possible by BLS/ALS ground personnel for the purpose of medical control and to confirm transport destination. The medical control should contact the receiving facility.

When the use of a helicopter is believed by the field personnel to be the most expeditious and efficacious mode of transport, contact of local online medical control and activation of the trauma system will be concurrent to the activation of the helicopter.

#### Patient Care Procedure #4 (continued)

Medical control will consider the following in confirming patient destination: location, ETA of helicopter, availability of ground transportation, proximity of other designated trauma receiving centers, their current capabilities and availability.

The air transport service is responsible for communicating to the initiating dispatch center the estimated time of arrival and significant updates as necessary. Air transport services are subject to their own protocols for appropriate activation. Air transport must contact the initiating dispatch center if unable to respond.

# **QUALITY ASSURANCE**

The West Region Quality Improvement Forum will review reports by air transport agencies of launches including cancels, transports, and destinations, as provided by the State Trauma Registry.

#### Patient Care Procedure #5

# **Hospital Resource - Interfacility Transfer**

#### **OBJECTIVE**

To establish recommendations for transport of patients from one designated trauma facility or undesignated medical facility to a designated trauma facility, consistent with established West Region guidelines.

#### **PROCEDURE**

All interfacility transfers will be in compliance with current OBRA/COBRA regulations.

Major trauma patients that were transported to undesignated trauma facilities for the purposes of stabilization and resuscitation must be transferred to a designated trauma facility (see Appendix D).

The transferring facility must make arrangements for appropriate level of care during transport.

The receiving center must accept the transfer prior to the patient's leaving the sending facility.

The receiving medical provider (physician) must accept the transfer prior to the patient's leaving the sending facility.

All appropriate documentation must accompany the patient to the receiving center.

The transferring physician's orders will be followed during transport as scope of provider care allows. Should the patient's condition change during transport, the sending physician, if readily available, or nearest medical control should be contacted for further orders.

Prehospital protocols from county of origin will be followed during the transport.

To the extent possible, a patient whose condition requires treatment at a higher level facility should be transferred to an appropriate facility within the region.

# **Patient Care Procedure # 5 (continued)**

The destination medical center will be given the following information:

- Brief history
- Pertinent physical findings
- Summary of treatment
- •Response to therapy and current condition

Further orders may be given by the receiving physician.

#### **TRAINING**

Hospital personnel will be oriented to regional transfer requirements and familiarized with OBRA requirements.

# **QUALITY ASSURANCE**

The numbers of and reasons for interfacility transfers will be reviewed by the West Region Quality Improvement Forum as needed, based on data reports supplied by the State Trauma Registry. Inclusion indicators will be developed by the Forum in accordance with state and federal guidelines, as well as regional standards.

#### **Patient Care Procedure #6**

# **Prehospital Report Form**

#### **OBJECTIVE**

To define the trauma information reporting requirement.

#### **PROCEDURE**

The regional standard for data reporting shall be consistent with WAC.

All critical patient information will be left at the patient's receiving facility. Completed prehospital forms will be submitted by prehospital providers to the receiving facility within two hours of patient arrival 95 percent of the time.

At a minimum, one copy of the prehospital report should be transported to the receiving facility, one copy should be retained by the prehospital provider, and one copy should be made available to the medical control or MPD for review.

These forms are to be used for gathering data for the State Trauma Registry.

#### Patient Care Procedure #7

#### **EMS/Medical Control - Communications**

#### **OBJECTIVES**

To define methods of expedient communication between prehospital personnel and medical control and receiving centers.

To define methods of communication between medical controls and regional designated trauma facilities and other facilities.

#### **PROCEDURE**

Communications between prehospital personnel and medical controls and receiving medical centers will utilize the most effective communication means to expedite patient information exchange.

#### **IMPLEMENTATION**

The State of Washington, the West Region EMS & Trauma Care Council, and regional designated trauma facilities will coordinate with prehospital and hospital EMS providers to create the most effective communication system based on the EMS provider's geographic and resource capabilities. Communication between the EMS prehospital provider and the receiving center can be direct (provider to center) or indirect (provider to medical control to designated trauma facility). Local medical control will be responsible for establishing communication procedures between the prehospital provider(s) and receiving hospital(s).

# **QUALITY ASSURANCE**

Significant communication problems affecting patient care will be investigated by the provider agency and reported to the West Region Quality Improvement Forum for review. The agency will maintain communication equipment and training needed to communicate in accordance with WAC.

The West Region Quality Improvement Forum will address the issues of communication as needed.

# PIERCE COUNTY PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURES

Prehospital triage is based on the following 3 steps: Steps 1 and 2 require prehospital EMS personnel to notify medical
control and activate the Trauma System. Activation of the Trauma System in Step 3 is determined by medical control\*\*

# STEP 1 ASSESS VITAL SIGNS & LEVEL OF CONSCIOUSNESS

- Systolic BP < 90°
- HR > 120°
- for pediatric (< 15y) pts. use BP < 90 or capillary refill > 2 sec.
- for pediatric (< 15y) pts. use HR < 60 or >120

Any of the above vital signs associated with signs and symptoms of shock and/or

- Respiratory Rate <10 > 29 associated with evidence of distress and/or
- · Altered mental status

\*\*If prehospital personnel are unable to effectively manage airway, consider rendezvous with ALS, or intermediate stop at nearest facility capable of immediate definitive airway management.



# STEP 2 ASSESS ANATOMY OF INJURY

- Penetrating injury of head, neck, torso, groin: OR
- Combination of burns > 20% or involving face or airway; OR
- · Amputation above wrist or ankle; OR
- · Spinal cord injury; OR
- · Flail chest; OR
- Two or more obvious proximal long bone fractures.



- 1. Take patient to the nearest Level I or Level II trauma center within 30 minutes transport time via ground or air transport according to DOH approved regional patient care
- 2. Apply "Trauma ID Band" to patient.

procedures.\*

\*Burns & amputations transported to Harborview Medical Center



#### STEP 3

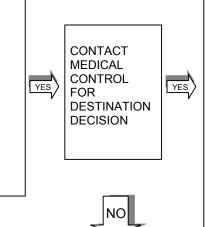
#### ASSESS BIOMECHANICS OF INJURY AND OTHER RISK FACTORS

- Death of same car occupant; OR
- Ejection of patient from enclosed vehicle; OR
- Falls > 20 feet; OR
- Pedestrian hit at ≥ 20 mph or thrown 15 feet
- High energy transfer situation

Rollover

Motorcycle, ATV bicycle accident Extrication time of > 20 minutes

- Extremes of age < 15 or > 60
- Hostile environment (extremes of heat or cold)
- Medical illness (such as COPD, CHF, renal failure etc.)
- Second/Third trimester pregnancy
- · Gut feeling of medic



- 1. Take patient to the nearest appropriate trauma center within 30 minutes transport time via ground or air transport according to DOH approved regional patient care procedures.
- 2. Apply "Trauma ID Band" to patient.



TRANSPORT PATIENT PER REGIONAL PATIENT CARE PROCEDURES



# **Mission Statement**

Continuously strive to optimize

Trauma/EMS patient care and outcome.

Approved by DOH: May 12, 1997 Revised by QIF on: November 14, 2002

Administrative Support Provided by

West Region Emergency Medical Services & Trauma Care Council, Inc.

Proudly Serving Grays Harbor, Lewis, N. Pacific, Pierce and Thurston Counties 2407 Pacific Ave SE, Suite B, Olympia, WA 98501 360-705-9019 • 1-800-546-5416 • FAX: 360-705-9676 • www.wrems.com

# Mission Statement

# Continuously strive to optimize Trauma/EMS patient care and outcome.

# GOALS: IMPROVE CARE, NOT JUST MONITOR OUTCOMES

#### 1. Collect Accurate, Timely Data

An essential prerequisite to effective quality improvement.

#### 1.a. Include Prehospital Care Analysis

True systems review requires more than hospital-alone quality review. All prehospital providers within the region should be included in the QI process.

#### 2. Analyze Patterns and Trends of Regional Trauma Care

Compare similarities and differences between West Region and other regional, state and national models.

#### 2.a Assess Patient Flow Patterns

A special concern of West Region is trauma patient flow patterns as well as inter-facility transfers and methods of transport. Ongoing monitoring will be required to provide data for consideration of additional (or fewer) designated trauma centers.

#### 2.b Compare Similar Hospital/Agency Outcomes

Case review requires objective comparisons with similar institutions within the region, state or nationally. In addition, a "benchmark" or "gold standard" to which comparisons can be made, regardless of institutional status, is required.

#### 2.c Analyze Individual Cases of Trauma Care

Highlighting the trends and patterns with individual case review. This will provide a specific focus for improvements and changes, as well as affording the opportunity to discuss individual cases.

#### 3. Action Plan/Loop Closure

#### 3.a West Region EMS Council

Provide communication on patterns and trends of regional trauma care to the West Region Council or appropriate agency.

#### 3.b Opportunities for Improvement

Recommend opportunities for improvement to the appropriate training or prevention committee of the West Region Council.

#### 3.c Loop Closure

Cases sent to the QIF for review and recommendation require follow-up with action

taken at the next meeting.

Approved: May 12, 1997 Page 2 of 9

#### **PRINCIPLES**

#### • Trauma Center Leadership

As described in WAC 246-976-910 (2) and RCW 70.168.090 (2): Levels II, and III trauma care facilities shall establish and participate in regional EMS/TC systems quality improvement programs.

#### • System Analysis

This is intended to be a process for continuous quality improvement of the regional system of trauma care throughout the age continuum. It is not intended to duplicate or supplant quality improvement programs of the individual hospitals, rehabilitation units, or prehospital agencies involved in regional trauma care. The state Trauma Registry will provide accurate data to assess regional performance as well as individual provider/agency performance.

#### • Confidential Case Review & Education

Effective identification, analysis and correction of problems requires objective review by qualified, appropriate members of trauma care programs, protected by a process which ensures confidentiality. The approach used by the QIF will be standard case review profiling and issue for education and/or process improvement.

Approved: May 12, 1997 Page 3 of 9

#### **PROCESS**

#### **MEMBERSHIP**

As stated in WAC 246-976-910(3):

The regional quality improvement program: Shall include at least one member of each designated facility's medical staff, an EMS provider, and a member of the EMS/TC region.

#### And WAC 246-976-910(4):

The regional quality improvement program shall invite the MPD and all other health care providers and facilities providing trauma care in the region, including non-designated facilities and non-verified prehospital services, to participate in the regional trauma quality improvement program.

In accordance with the above administrative code, the West Region EMS/TC QIF membership will be:

#### **Voting Members:**

Trauma Medical Director from each designated trauma and trauma rehabilitation center Trauma Nurse Coordinator from each designated trauma and trauma rehabilitation center Medical Program Director (MPD) from each county - total 4 EMS provider - 3 from each county (2 prehospital and 1 private) CQI representative – 1 prehospital and 1 hospital from (level II and/or III) each county Regional EMS Council Chair Regional injury prevention representative: 1 pediatric and 1 adult

\*Any of the above members may be replaced by an official designee from the represented facility or agency.

#### **Non-voting Members:**

Emergency Department Directors (clinical and medical)

ICU (Critical Care) Department Directors (clinical and medical)

State DOH staff

Appropriate medical specialists as needed and determined by chairperson

Non-designated facility representatives

Coroner/Medical Examiner from each county

EMS Coordinator/Director from each county

Regional Council staff member

- \*Airlift Northwest
- \*Dispatch center representative from each county
- \*Out of region member (required with joint designation)

**Quorum:** A quorum shall consist of a minimum of 10 voting members at the beginning of the meeting and will continue as long as 6 or more voting members remain.

Approved: May 12, 1997 Page 4 of 9

<sup>\*</sup>As appropriate for QA purposes

#### Confidentiality

Actions of the QIF are confidential as provided in WAC 246-976-910 (5)(e)(f)(g)(h) and protected by RCW 43.70.510 and chapters 18.71, 18.73, and 70.168. *See Attachment A.* A written plan for confidentiality is required. *See Attachment B.* Notification in writing of the confidentiality of each meeting is required. Information identifying individual patients cannot be publicly disclosed without patient consent.

#### Regional QA meetings

- > Frequency: Quarterly
- ➤ 3 hours in length
- Chairperson and 2 Vice Chairs: 3 year position elected by the majority of voting members (preferred structure: Chair = MD)
- Review of Plan goals every 3 years with change in Chairperson

#### • Four components to meeting

- Review of regional data and trends
- Performance Improvement (PI) Project Presentation
- Focused case(s) review with directed discussion
- Next QIF meeting goals and targets
- Yearly process/injury focus will be identified at the last meeting of year

#### • Summary Conclusions and Reporting

The Chairperson is responsible for providing summary conclusions of discussions. Provisions must be provided for feedback to the Department of Health and the regional council on identified EMS/TC issues and concerns.

Approved: May 12, 1997 Page 5 of 9

#### **DETAILS**

#### **Component 1:** Review of regional data and trends

The state Trauma Registry shall provide a routine Trauma Summary Report (as defined) distributed with the agenda in advance. These reports are standardized, emphasizing the state and regional trauma system.

• The state Trauma Registry shall provide a focused report on issues/filters as requested

#### **Component 2: Performance Improvement Project Presentation**

Presentation will include following points:

- Problem identification
- Process changes
- Implementation process
- Evaluation
  - o Lessons learned

#### **Component 3: Focused cases reviews**

Designated agencies present injury or process specific case reviews as assigned by the committee. A minimum of two cases will be presented, not to exceed 30 minutes and include:

- Topics from case for discussions
- Continuum of care from dispatch through rehabilitation
- Major players involved be present or available for questions and discussion
- Audio-visual aids
- Lessons learned
- Suggested template for case review (See Attachment C)

#### Component 4: Identification of next quarter's meeting goals and targets

Approved: May 12, 1997 Page 6 of 9

ATTACHMENT A

#### WEST REGION QUALITY IMPROVEMENT FORUM

# QI FORUM MEMBERS AND GUESTS CONFIDENTIALITY AGREEMENT

in accordance with RCW 70.168.090(3) and (4)

The undersigned attendees of the QI Forum meeting held <u>(date)</u>, agree to hold in strict confidence all information, data, documentation, and discussions resulting from this meeting, and subsequently documented in meeting minutes. No information will be disclosed to parties outside this QI Forum, except as agreed to by the attendees for the purposes of follow-up, resolution or systems design changes. Failure to observe this agreement will result in dismissal from the Forum and possible personal liability.

First Name	Last Name	Title	Job Title	Agency	Signature

Approved: May 12, 1997 Revised: March 15, 2001 2<sup>nd</sup> Revision: November 14, 2002

#### ATTACHMENT B

# West Region Quality Improvement Plan Confidentiality and Exemption from Discoverability Policy and Procedures June 1997

#### **Policy**

It is the intention of the West Region Quality Improvement Forum (QIF) to use the information gathered to support clinical research and improve patient care through improved systems performance. It is necessary that providers have protection from discoverability and possible liability to reach that end.

#### Pledge of Confidentiality

All attendees of the QIF will sign a pledge of confidentiality which will also act as a record of attendance. At each meeting the pledge of confidentiality will be read into the minutes. (See Attachment A).

#### **Documentation**

Patient records will be identified by the unique Trauma Registry identifier. Patient information cannot be publicly disclosed without written permission of the patient or guardian.

All QIF handouts shall be labeled "Confidential QI Document/Privilege Information/Not Authorized for Distribution." All confidential documents will be collected at the end of the meeting, and all copies will be destroyed following the meeting. One permanent copy will be kept in a locked cabinet.

#### Minutes

Minutes from QIF meetings will be prepared by the West Region EMS staff. Minutes will be reviewed and approved by the members. One copy of the minutes will be kept for the purpose of record by the West Region EMS, and its staff will be responsible for collecting and destroying all documents following the meeting. Retention schedule for minutes will be 4 years. The one permanent copy will be kept in a locked cabinet. Any case specific information presented during QIF meetings will be held in strict confidence among those attending the meeting. All identifying references to specific cases will be omitted from meeting minutes.

#### Reports

A report will be generated to summarize significant findings of the materials reviewed in the QIF meeting. The summary report will be modified to scrub information that might identify individuals or agencies involved in the QI review. Names, dates, times and situations may be modified to prevent loss of confidentiality while communicating intent of the finding(s). The QIF Chair will approve the summary report before it is released external to the QIF.

#### **Access to Information**

All members of the QIF, and those who have been invited to attend by members of the forum, have access to view or discuss patient, provider, and systems information when the patient and the provider's identifying information has been obscured. It is the obligation of the attendees to keep all information confidential and to protect it against unauthorized intrusion, corruption, and damage.

Approved: May 12, 1997 Page 8 of 9

#### ATTACHMENT C

#### TEMPLATE FOR CASE REVIEWS

#### I. WRQIF Case Review

- Name of presenter
- Name of agencies represented
- Date

# II. Topic

• Question or issue to be addressed with this case review

# III. Scene/Background Information

# IV. EMS Findings/Interventions

- Description of Pt
- Vital Signs
- Interventions

# V. ED Interventions/Findings

- Vital Signs
- Interventions
- Findings
- Injury List
- Consults
- Pt Disposition

# VI. Hospital Course

- Length of Stay
- Surgeries
- Other Injuries/Procedures Done
- Cost

#### VII. Outcome

- Discharge Status
- Current Update on Pt Outcome

Approved: May 12, 1997 Page 9 of 9